

Streamlining the Base Conversion Process

A Position Paper Prepared by the Bay Area Defense Conversion Action Team Identifying Issues and Actions to Ease the Burden of Economic Recovery on Local Communities

Overview

"What we really need from you is your help in changing public opinion. We need to have the Defense Reform Task Force not to simply to file another report. We've got enough reports, we know what the problem is. What we need to do is to build public support and congressional support for the kind of changes that are necessary in order to make our military a 21st century military and not encumbered by either a 20th century or, indeed, 19th century infrastructure. So what we need from the Task Force are really ways in which we can break down bureaucratic barriers, ways in which we can find common ground where there are conflicting opinions, ways in which we can influence editorial support, and basically solid citizenry support and congressional support for the kind of changes that are necessary."

Secretary of Defense William Cohen
October 17, 1997

Background

Bay Area Impact

Bay Area communities have been profoundly impacted by base closures. Twelve bases -- Alameda Naval Air Station and Aviation Depot, Fleet and Industrial Supply Center (FISC) Alameda and Oakland Annex, Hamilton Army Airfield, Hunters Point Naval Shipyard, Mare Island Naval Shipyard, Moffett Naval Air Station, Oakland Army Base, Oakland Naval Hospital, Onizuka Air Station (realignment), Point Molate Naval Supply Center, Presidio Army Base and Treasure Island Naval Station -- have been closed, or are in the process of closing or realigning by 2002-2005. Six counties -- Alameda, Contra Costa, Marin, San Francisco, Santa Clara and Solano -- are affected. Particularly hard hit are the communities of Alameda, Novato, Oakland, Richmond, San Francisco, Sunnyvale, Mountain View and Vallejo.

In 1995 the Bay Area Defense Conversion Action Team (BADCAT), working with local reuse coordinators from the Bay Area's closed and closing military bases, and representatives from public and community organizations, and businesses prepared a policy paper, "Expediting Economic Development on Closing Bay Area Military Bases: A Proposal to Improve the Base Conversion Process." The paper outlined a series of issues related to the federal base closure procedures aimed at fulfilling President Clinton's Five-

Point Program, the Pryor Amendment, and the 1994 Base Closure Community Redevelopment and Homeless Assistance Act. While these programs and 1996 regulatory changes are intended to ease the economic burden on local communities seeking to acquire former military base property, progress to date has been slow and conflicts with federal budget reduction goals.

Three issue areas continue to plague local communities today in their efforts to expedite economic reinvestment and job creation through base reuse. This position paper outlines these three issue areas: 1) ensuring sufficient funds for complete environmental clean-up; 2) upgrading infrastructure; and 3) streamlining leasing and federal review procedures and proposing federal policy options, which will support local communities' reuse activities and facilitate the realization of revenues for necessary infrastructure improvements.

The Defense Reform Initiative

On November 10, 1997, Defense Secretary Cohen announced the Defense Reform Initiative which calls for **two more rounds of base closure in 2001 and 2005** to reduce overall costs. The Defense Reform Initiative has four "pillars": 1) reengineer the Department of Defense (DoD) by adopting the best private sector business practices in defense support activities; 2) consolidate military defense organizations to remove redundancy and move program management out of "corporate" (DoD) headquarters and back to the field; 3) "compete" (competitively bid out) many more functions now being performed in-house, which should improve quality, cut costs, and make the Department more responsive; and 4) eliminate excess infrastructure by closing excess facilities. The section "Eliminating Unneeded Infrastructure" delineates a three-prong approach: close excess infrastructure, including more base closures; consolidate or restructure the operation of support activities; and demolish unneeded buildings. (See Appendix A). Under the proposal, by January 1, 2000, DoD will also initiate privatization of all utility systems except those needed for unique security reasons or when privatization is not economical.

As the Department of Defense considers closing additional facilities, there is an **urgency to improve the current base closure process**. Bay Area communities are concerned that before the Department of Defense commits any additional dollars to new base closures that the current closure process be completed and sufficient dollars be allocated to already impacted closure communities. The Defense Reform Initiative continues to raise these very serious issues for the Bay Area: ensuring environmental clean-up, upgrading infrastructure, streamlining the process and timeliness of leasing, expediting the property transfer process, valuation of surplus property, and uniformly applying regulations within and amongst all military services.

The Time is Now

The time for Bay Area communities to unite around these policy issues is **now!** The Bay Area is especially challenged by the **unparalleled** scale of defense facilities downsizing unique to this region. This has created enormous regionwide affects: 15 percent of the total number of national base closures and 30 percent of national civilian job losses from

base closures occurred in the Bay Area. While the economy has recovered strongly from the recession of the early 1990s, local communities, and the region as a whole, continue to carry a heavy burden in successfully converting closing military bases to economically viable sites. Local communities have made substantial progress and have devoted a tremendous amount of time and resources to the effort. But the successful and expeditious conversion of the bases remains very difficult because of key issues to be resolved at the federal level. The opportunity to create livable communities and sustainable economic growth on the former military bases is constrained until the following policy areas are addressed. A number of policy options are included as possible solutions to improving the current base closure process. It is important to re-educate and to re-emphasize to the Defense Reform Task Force and our congressional, state and local representatives the seriousness of these as yet unresolved issues.

ISSUE #1: ENSURE SUFFICIENT FUNDS FOR COMPLETE ENVIRONMENTAL CLEANUP

The federal government must ensure and encumber sufficient funds as part of the federal budget to complete all environmental cleanup in a timely manner.

For the past three years, less than half of the projected costs needed for each year's clean-up activities was budgeted. The price tag for cleaning up the fourteen Bay Area bases is estimated at \$1.4 billion, while the estimated costs for all of California's military bases is \$4.4 billion. As a result, the cleanup process is agonizingly slow and continues to extend well beyond the originally estimated completion timeframes. For example, Hamilton Army Airfield has been addressing cleanup issues for 20 years. (See Appendix B for specific base details.)

Principal Policy Option

- ★ Include in any Defense Reauthorization Bill language which states that already encumbered federal funds not be reallocated to additional rounds of base closures until promised Defense Environmental Restoration Program (DERP) dollars and projects have been completed. The FY 96 DERP Report to Congress states *"dramatic changes in funding from one year to the next create tremendous upheaval and impede program execution and progress in future years."* This report also states that of the total 4,787 Base Realignment and Closure (BRAC) sites nationwide, response is complete at only 1,483, or 31 percent, of them. (See Appendix C for DoD cleanup status report.)

Additional Policy Options

1. Congress should give DoD a timetable for remedy implementation at its closing and realigning military bases.¹
2. Congress must appropriate, and DoD must use, sufficient funding to remediate property quickly and safely to a risk level that is in accordance with the community's reuse plan.
3. DoD should refrain from pressuring communities to accept property which has been remediated to a level safe for industrial use, if higher land uses are called for in the community's land use plan.
4. The military services should prioritize cleanup of parcels by the economic value to the community, and not merely by cost of cleanup.
5. Federal government establishes a base closure fund which covers full cleanup of all parcels on all closed bases to the remediation level required by locally planned reuse, and provides that local governments may enter into public-private agreements to expedite cleanup if such a partnership approach will reduce the projected cost by five percent or greater.
6. Local bond issued to fund cleanup with 100 percent guaranteed by federal government and agreement that federal government retains liability for cleanup.
7. Federal bond issued to cover full costs of cleanup within a 5 to 15 year maximum timeframe.

ISSUE #2: UPGRADE INFRASTRUCTURE

Address infrastructure requirements to support reuse of existing buildings and facilities and to assist local communities in upgrading to code all infrastructure necessary for successful economic conversion of the closed or closing military bases.

To attract businesses, older buildings must be renovated with adequate utilities including power, water, sewer, communications and other necessary remodeling to assist tenants. Additionally, utility systems, roads and buildings must be brought up to code for longer-term leasing and/or purchase. The cost of such infrastructure improvements inhibits the ability of local communities and businesses to finance them, thereby slowing reuse and revenue generation which could in turn assist in defraying costs for further infrastructure improvements. (See Appendix D.)

¹ Concurrence with additional policy options 1-4 from recommendations of the International City/County Management Association (ICMA) Base Reuse Consortium, July 18, 1997.

Principal Policy Option

- ★ Establish federal revolving loan fund for military base infrastructure improvements which would allow local communities to finance improvements and repay such loans with revenue generated by subleases and/or purchases of buildings. Similar state revolving loan funds specifically earmarked for military base infrastructure improvements should also be explored.

Additional Policy Options

1. Collaborate with state governments to support redevelopment designation and state revolving loan funds for infrastructure improvements. The recently approved California Infrastructure and Economic Development Bank structure should continue to include military base sites and a possible state bond to finance this structure, and should provide capital to improve infrastructure on the bases.
2. Designate all military bases as Enterprise Zones or Local Agency Military Base Recovery Areas (LAMBRAs), allowing reduced costs for businesses willing to make infrastructure improvements and allowing up to 30 years for code compliance or exempting military bases from code compliance.
3. Collaborate with state governments and the private sector to establish innovative financing mechanisms to fund infrastructure improvements.
4. Explore opportunities to reduce capital investment costs in utility infrastructure through the current electrical utility restructuring in California as well as the DoD Defense Reform Initiative goal of privatizing utilities by the year 2000.

ISSUE #3: STREAMLINE LEASING AND FEDERAL REVIEW PROCEDURES

Streamline leasing and federal review procedures to support local communities' reuse activities as a means of generating revenue to minimize economic impact on local communities.

Under current procedures the leasing includes an agreement between a local jurisdiction and the military to allow a community to sublease buildings and/or parcels. Reviews of these interim subleases have taken more than two months for five to ten year leases. These delays cause a loss of tenants who can occupy properties available sooner in the private sector. Bay Area closed and closing bases are still experiencing delays even with a Navy directive to expedite leases by giving more approval authority to the local Engineering Facilities Agency (EFA) and with model lease agreements.

Additionally, the military unnecessarily monitors tenant compliance with leases and code requirements which duplicates--both in staffing and administrative costs--functions which are available through local building inspection and code enforcement staff. Local reuse coordinators also report that the same regulation is being interpreted differently for each base, including the criteria for "licenses" vs. "leases."

Other reviews required by the federal government with regard to environmental documents and economic development conveyance requests have taken over a year to complete (Mare Island, for example), further delaying local communities in expediting reuse and economic conversion of the closed and closing military bases. Further, there is no consistent process for agreeing on the terms of property transfers or valuation of surplus federal property in economic development conveyance property negotiations.

Principal Policy Options

- ★ Establish timeframe for federal sublease reviews at a maximum of 60 days or sublease is automatically approved.
- ★ Implement and follow Deputy Undersecretary John Goodman's directive that military departments "will delegate, to the extent practicable, interim lease approval authority to field divisions. . . and ensure that Local Reuse Authorities (LRAs) can approve subleases that conform with the negotiated master lease." To date, the military services have failed to delegate authority from Washington, DC, resulting in costly delays to base closure communities as the private sector will not wait for a lengthy approval process for base properties.
- ★ The Department of Defense should formalize the decision-making structure and accountability for the reuse process within each military service. The Air Force, for example, has a specific base closure organization to deal with affected communities, and similar organizations should exist in all branches.
- ★ Interpret regulations consistently and fairly within and across military services, including "licenses" and "leases."
- ★ Delete BRAC provisions mandating that any profits earned by a Local Redevelopment Authority (LRA) from the sale of transferred base property be passed on to the military. Local communities should benefit from their efforts to redevelop former base land, providing an incentive and a revenue source for further redevelopment efforts and job development.

Additional Policy Options

1. Require the federal government to pay a 10 percent penalty to the local jurisdiction for any delay of more than 30 days in review procedures for leases, subleases,

environmental reviews, or economic development conveyance (EDC) reviews. In the private sector, contractor agreements with government agencies include penalties for delays caused by the contractor.

2. Establish timeframes for National Environmental Policy Act (NEPA) and economic development conveyance (EDC) processes at federal level, and if timeframe for any step is exceeded by 15 days, local jurisdiction can take over procedure or EDC is automatically approved.
3. BRAC law should be amended to include the changes called for in House legislation HR 1300 giving a lessee first right of refusal for leased property, permitting a lessee to sublease the property for profit during the term of an interim lease, and erasing the mandate for a lessee to remove all capital improvements made to property during the lease.²
4. Delegate property management, including monitoring of sublease compliance, to local jurisdictions to reduce administrative costs and duplication.
5. Base Reuse Implementation Manual (BRIM) frameworks should be similar among the military services, while still allowing flexibility to address site specific problems.
6. Fair-market value based upon local reuse plans done by community consensus should be considered acceptable by the military rather than the military's judgment as to highest and best use in valuation of surplus federal property. DoD goals, like community goals, should focus on job creation and economic reuse.

Conclusion

Bay Area communities--elected officials, business and community organizations, and impacted citizens--must continue to educate their constituencies about the tremendous impacts to local revenues and to effective economic development on the closing bases and surrounding communities. **The current base closure process must be completed--funding secured and policies streamlined--before the Department of Defense commits any additional dollars to new base closures in 2001 and 2005. Base closure issues and policy options outlined in this paper must be "on the front burner" of policy making at all levels.**

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² Concurrence with additional policy options 3, 5 and 6 from recommendations of the International City/County Management Association (ICMA) Base Reuse Consortium, July 18, 1997.

Appendix A

Chapter 4: Eliminating Unneeded Infrastructure

The Department is encumbered with facilities we no longer need. These facilities drain resources that could otherwise be spent on modernization. To this end, we believe that a three-pronged strategy is required: close excess infrastructure; consolidate or restructure the operation of support activities; and, demolish unneeded buildings.

During the 1980s, American corporations from automobile and computer manufacturing to consumer retail reduced their plant and office space as part of their effort to reorganize, restructure and reform their business practices to stay competitive in the global marketplace. The Department needs to make similar infrastructure reductions.

Highlights — Eliminating Infrastructure

The Department must stop the drain on resources caused by excess Cold War infrastructure. That means:

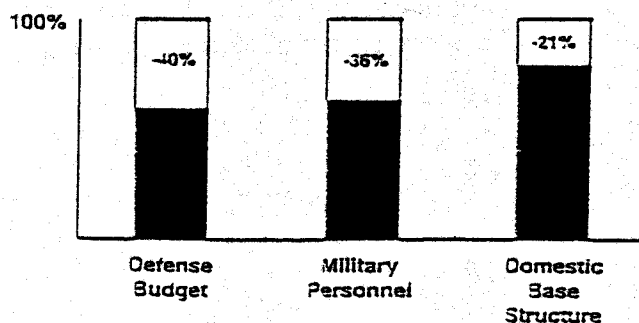
- ◆ DoD will seek congressional authorization for two additional rounds of BRAC in 2001 and 2005.
- ◆ DoD will consolidate, restructure and regionalize many of its support agencies to achieve economies of scale.
- ◆ DoD will seek permanent legislative authority to privatize family housing construction.
- ◆ By January 1, 2000, DoD will initiate privatization of all utility systems except those needed for unique security reasons or when privatization is uneconomical.
- ◆ Within six months the newly renamed Defense Energy Management Center shall outline a blueprint for three regional demonstrations of integrated energy management, to include supply and demand management.

Base Closure

During the post-Cold War military drawdown, DoD reduced both the Defense support structure and the force structure. But infrastructure reductions — including military bases, facilities,

and buildings — have lagged behind force reductions. As shown in Figure 4a, force structure has fallen 32 percent since 1989 and will decline to 36 percent by 2003 as a result of the QDR. At the same time, after four rounds of base realignments and closures, our worldwide base structure has declined only 26 percent and domestic base structure has declined only 21 percent. This relative disparity between base structure and force reductions wastes limited resources on maintaining unneeded bases.

Figure 4a. Relative Drawdown



We close bases for a number of important reasons — to reduce our annual operations and maintenance expenses, consolidate our forces, and improve readiness and modernization by directing more resources to forces rather than bases.

Since 1988, DoD has only closed bases after first going through a rigorous process generally referred to as Base Realignment and Closure (BRAC). This process was adopted by Congress to create a fair, timely, thorough, independent, and

publicly open review of base closures, the recommendations of which must be accepted or rejected in whole first by the President, then by Congress (see box on BRAC).

BRAC — Making Base Closure Independent, Open & Fair

Efforts to close Department of Defense bases historically have met with as great a deal of congressional concern about the well-being of local communities.

To address their concerns, Congress adopted legislation entrusting the process to an independent commission to develop and recommend a tentative slate of closings and realignments. That slate could not be modified by the President or the Congress, but rather approved or disapproved in total. This "all or nothing" provision avoided individual deal-making over proposed closings.

The BRAC process works as follows: DoD carefully evaluates and ranks each base according to the published criteria, which include military value, return on investment, environmental impact, and economic impact on the surrounding communities. The Secretary of Defense then

recommends to the BRAC Commission bases for closure and realignment. The Commission reviews the DoD recommendations independently, holds public meetings, and presents its recommendations to the President. The Congress and the President must then either accept these recommendations in total, or reject the entire package.

By making the process as open and independent as possible, Congress and the Department have attempted to close the right facilities, conduct the process fairly, and reduce unnecessary defense expenditures. The Department does not, however, consider its role in the process to be limited to closing a base. By providing extensive assistance to communities to facilitate reuse, the Department seeks to help communities rebound, achieve economic growth, and even become more robust than before base closure.

In the previous four rounds of BRAC (1988, 1991, 1993, and 1995) the Department made substantial progress in eliminating unneeded infrastructure. These rounds involved the closure or realignment of 152 major installations and 235 smaller installations.

The Department will invest approximately \$23 billion to implement these recommendations — and will save approximately \$36.5 billion. FY 1996 was the crossover year in which annual BRAC savings exceeded costs — so we are saving money. Recurring savings after FY 2001 will amount to approximately \$5.5 billion each year. Costs and savings are detailed in Figure 4b.

Figure 4b.

BRAC Costs and Savings
(\$ Billions)

	Major Closures	Major Realignments	Costs (\$)	Savings by FY2001 (\$)	Annual Savings after FY 2001 (\$)
BRAC 88	16	4	2.8	6.5	0.7
BRAC 91	26	17	5.4	12.4	1.5
BRAC 93	28	12	7.9	11.5	2.0
BRAC 95	27	22	6.9	6.1	1.4
Total	97	55	23.0	36.5	5.6

While some have questioned our performance, independent experts have confirmed our savings. In 1997, the Congressional Budget Office reported that "DoD is carrying out BRAC procedures and decisions effectively," and further concluded that "BRAC actions will result in significant long-term savings." The future forces of the military will require steadily increasing investments for modern systems, new technologies, and new weaponry. To afford these investments, we must eliminate unneeded infrastructure.

Putting Bases to Productive Reuse

Communities are often concerned that a base closure may create dislocation, but our experience shows that after an initial adjustment, the closure often becomes an engine for economic growth. Across the country, base closure communities have found that their facilities are often very attractive sites to private sector businesses. The Department, along with other Federal agencies, has worked closely with communities to facilitate their reuse planning. We will maintain this commitment to economic revitalization as we move forward.

We provide grants and transition assistance to help communities plan for reuse. DoD awards an average of \$1 million (and up to as much as \$3.5 million) in planning grants to each base closure community. We are also streamlining the process

for property transfer and environmental cleanup. As a result, BRAC 95 sites are closing in two-third the time it took to close BRAC 88 bases. Closing bases faster puts these properties back to work sooner, creating jobs more quickly and delivering more savings to DoD and to the taxpayer.

Most importantly, we are helping to create new civilian jobs. At those former bases which have been closed a year or more, the job-replacement rate has already reached 65 percent.

A number of success stories stand out. Pease Air Force Base in New Hampshire is now the Pease International Tradeport, employing 1,219 people at a brewery, a consular center, an airfield, and a steel manufacturer, among others – where only 40 civilians were employed when the base was active. The Sacramento Army Depot closed in 1994, with a loss of slightly over 3,000 federal jobs. It is now the home of Packard Bell which employs over 4,000 people. That number is expected to grow to 10,000 in three years. Ratoul, Illinois, has successfully brought in over 40 commercial and industrial tenants, providing over 2,200 new jobs at the former Chanute Air Force Base, where only 1,035 DoD civilians had been employed.

With good planning and appropriate support, communities can thrive in the wake of a local base closure.

SECDEF REFORM DECISION: DoD will seek congressional authorization for additional rounds of Base Realignment and Closure in 2001 and 2005.

Close Unneeded Bases

Despite progress with previous rounds, the Department still operates facilities that it no longer needs and cannot afford. Our analysis is based on comparisons of aggregate drawdown figures and specific force reductions. By comparing aircraft to air bases, ships to pier space, brigades to maneuver facilities, we know that we have too many bases. Eliminating this excess infrastructure and consolidating our forces at fewer bases would permit the Department to spend its resources more wisely on forces and equipment, which are critical to a ready and modern force. The QDR found that there is enough excess capacity in the Department's infrastructure to warrant two rounds of closure and realignment similar in size to those conducted in BRAC 93 and 95.

The two rounds would provide significant savings, as described in Figure 4c.

We will therefore submit to Congress a request for two additional rounds of BRAC, the first in FY 2001 and a second in FY 2005. The four-year interval between the two rounds provides the Military Departments with more time to implement any closure and realignment decisions. It will also enable DoD to better assist local communities put closed facilities to productive reuse.

Figure 4c. Estimated Future BRAC Savings (\$ billions)

	BRAC 2001	BRAC 2005
Total Investment to Closure	6.1	6.0
Gross Savings during Closure	8.6	5.9

Each round will provide \$1.4 billion in savings each year after closure is completed.

Consolidation, Restructuring, and Regionalization

Many current DoD activities can be made significantly more efficient by consolidating or restructuring operations. It is relatively more expensive to operate and maintain many small facilities than it is to run a few number of larger ones. Prime candidates for consolidation are the Defense Information Systems Agency (DISA), Defense Finance and Accounting Service (DFAS), laboratories, and test & evaluation facilities. Demolition is related to consolidation, because only by divesting ourselves of buildings that are no longer needed can we fully accrue the benefits of limiting our number of facilities. Finally, regionalization of base support services provides another important avenue of reform.

DISA Megacenters

DISA provides common command, control and telecommunications services to DoD activities, including data processing, software development, and maintenance services. DISA is reducing information technology costs and eliminating excess facility capacity through a DoD-wide consolidation of data processing centers. DISA has already reduced the number of its facilities from 194 to 16. However, best industry practice indicates that further consolidation of data centers will reduce costs and position the Department to support common data processing requirements across the Services. The Secretary has directed DISA to further consolidate its current operations into six large facilities.

DFAS Operating Locations

DFAS was created to eliminate redundancy in financial accounting and bill paying activities throughout DoD by consolidating these functions into a single organization. DFAS will continue its efforts to consolidate and streamline its operations, standardize business practices, modernize support operations, improve customer service, and ensure the integrity of the Department's financial and accounting systems. DFAS has already reduced the number of its offices from 332 to 26. DFAS will now eliminate another eight facilities.

Labs/Test & Evaluation Facilities

Each of the Military Departments operates laboratories to develop military technology and test & evaluation facilities to demonstrate and validate the capabilities of new technologies and equipment. The performance and cost of these facilities can be improved through a combination of improved management, internal restructuring, and increased inter-Service support. The Secretary also has directed each of the Military Departments to review laboratories and test & evaluation facilities to identify restructuring opportunities.

Regionalization

In areas of heavy concentration of installations, we can save funds by sharing infrastructure and services across commands, bases, and the Services. For example, the Navy will regionalize many of its own activities at its fleet concentration centers — Norfolk, San Diego and Mayport. The Joint Staff is now analyzing regionalization across all Services in Hawaii.

Demolition of Excess Buildings

This past summer, the Services surveyed their installations and found that they no longer need 8,000 buildings totaling 50 million square feet. Disposing of these buildings will both cut costs and improve safety. We are increasing funding for demolition in order to be able to eliminate all these buildings by 2003. As our consolidation and restructuring initiatives are implemented, we will continue to look for additional candidates.

Revitalizing Housing And Utilities With Private Sector Capital

Constrained budgets have forced DoD to make tough budget choices. Over a number of years, our infrastructure has deteriorated. Capital requirements for revitalization far exceed the funds available. Two particularly acute issues for the Department that affect the quality of life of our military personnel and their families and the operations of our bases are family housing and utilities. In both of these areas, Congress has provided us with the tools to leverage private sector resources and speed revitalization. Specifically, we can now convey houses and utilities to private sector entities who can invest their own resources to provide better services to our military communities.

Housing

Housing is a critical element of the quality of life of our military personnel and their families. Inadequate housing reduces our ability to retain our top-notch professional force and thereby affects our overall readiness. DoD already relies on the private sector to house about two-thirds of our military families. The other one-third live in some 300,000 DoD-owned housing units. Due to neglect over many years, approximately 200,000 of these units are below an acceptable standard. With our current and foreseeable housing budget, our traditional approach would require some 30 years and perhaps as much as \$20 billion to bring these houses up to an acceptable standard.

To address this problem, Congress recently provided the Department with important new authority to enter into arrangements with the private sector. Specifically, the Department can now provide direct loans and guarantees to private developers. We can convey or lease property and facilities to private firms in order to stimulate their own efforts in areas where we need housing. Private firms can now develop, build, finance, manage, maintain and own quality, affordable housing used by our service members. Using these new tools,

we will be able to speed the revitalization and replacement of military housing. To implement this program, DoD created a Housing Revitalization Support Office (HRSO). Joint site teams composed of HRSO and Military Department personnel have visited more than 30 sites to determine the feasibility of privatization.

So far, we have awarded two projects accounting for over 400 units at Naval Air Station Corpus Christi, Texas, and almost 200 units at Everett, Washington. We are in source selection for projects at Fort Carson, Colorado, and Lackland Air Force Base, Texas. We are developing proposals for housing at a number of other bases, including Robins Air Force Base in Georgia, Camp Pendleton in California, Marine Corps Logistics Base Albany in Georgia, and Fort Hood in Texas.

Over fifty other projects around the country are currently being reviewed for possible privatization. This new legislation contains a five year test period for the privatization initiative, which means that during that five years, DoD must request permanent legislative authority from Congress if the Department is to continue this

SECDEF REFORM DECISION: Seek permanent legislative authority to privatize family housing construction.

Figure 4d.

Improving Housing Through Privatization — Status

NAS Corpus Christi, TX	404 units	Navy	Project Awarded
NAVSTA Everett, WA	185 units	Navy	Project Awarded
Fort Carson, CO	2,600 units	Army	In Competition
Lackland AFB, TX	285 units	Air Force	In Competition
Camp Pendleton, CA	700 units	Marine Corps	Developing Proposals For Competition
MCLB Albany, GA	180 units	Marine Corps	
Robins AFB, GA	700 units	Air Force	
Fort Hood, TX	5,825 units	Army	

SECDEF REFORM DECISION: *By January 1, 2000, the Department will privatize all utility systems (electric, water, waste water and natural gas) except those needed for unique security reasons or when privatization is uneconomical.*

program. Based on experience and lessons learned in the first two years of the program, the Department expects to privatize about 3,500 units by FY 1998, 15,000 units by FY 1999, and 30,000 units by FY 2000. In these next few years, as DoD continues to make strides toward privatization, we will request permanent legislative authority from Congress. With these new tools, we are seeking to eliminate all inadequate housing by 2010 – nearly two-thirds faster than otherwise possible.

Utilities

Utilities provide a similar challenge. The Department's utility systems provide the electricity, water, steam, and sewers critical to the operation of our installations. Many of these systems are old and in need of significant repair. Here, too, the required funding exceeds the Department's current and anticipated resources. Local utilities and other entities, by contrast, do have the resources to invest in these systems and the expertise to maintain them appropriately.

For this reason, the Department is now embarking on an ambitious program to transfer ownership, operation, and maintenance of its utility

systems, dependent on life-cycle economics and mission readiness. So far, 25 systems have already been privatized, and some 45 are in the process of privatization. Additionally, the Services have begun studies of an additional 150 systems, with some 500 remaining for review.

In the past, progress in privatizing utilities has been slow, because the Department was obligated to seek special approval from Congress for each transaction with the private sector. In an effort to speed the process and capture the benefits of privatization, the Department proposed and Congress recently approved broad-based authority to pursue utility privatization more expeditiously.

By shedding excess utility infrastructure, other benefits will also accrue to DoD. The Department spends over \$2.2 billion a year on energy facilities. This large buying power potentially gives us great leverage in the market. But we fail to take advantage of it because we are too busy managing power infrastructure rather than managing energy. One of the key lessons learned by industry in the last 20 years is that a business does not need to own or manage power infrastructure in order to manage

Figure 4a.

Privatizing Utilities — Current Project Status

	Electric	Water	Waste Water	Natural Gas
Privatized	4	2	5	14
Retained In House	9	10	9	4
Privatization In Progress	15	9	8	13
Under Study	45	44	42	16
To Be Studied	185	132	133	56
TOTAL	258	197	197	103

SECDEF REFORM DECISION: DoD should manage energy, not power infrastructure. The renamed Defense Energy Management Center shall outline in six months a blueprint for three regional demonstrations of integrated energy management, to include supply and demand management.

energy. Indeed, managing the infrastructure often blinds managers to the true task, which is to minimize overall energy costs.

Too often the organizational subdivisions in the Department constitute insurmountable roadblocks in this area. An Air Force base and a Navy facility next door to each other are denied the opportunity of joint purchasing power because each installation is forced to operate inside Service channels. Yet energy is overwhelmingly a regional

commodity. Opportunities to optimize the supply must be handled on a regional basis as opposed to an organizational basis.

In order to facilitate a revolution in business in this area, the Secretary has directed that the Defense Fuels Supply Center (renamed the Defense Energy Management Center) establish an "Enterprise Office" that will work with various installations in a geographical region to create wider management arrangements to maximize savings.

Conclusion

The need for the Department of Defense to rid itself of unneeded infrastructure in order to free up resources for future investment is a familiar Washington story of the past few years, and one that many are tired of hearing. Yet, rather than going away, it will in fact grow more urgent and compelling in the coming years.

We are weighed down by facilities that are too extensive for our needs, more expensive than we can afford and detrimental to the efficiency and effectiveness of our nation's Armed Forces. Equally tragic, we are losing opportunities to transition these facilities to more productive private and public uses at a time of relative national economic prosperity. We have learned much during recent years about how to best promote base reuse. While the transition is

never easy, many communities have learned that the results can be positive, providing greater long-term economic growth and security.

At the same time, we must better manage key assets on our remaining bases, particularly housing and utilities. Providing quality housing is not only the right thing to do for our service members and their families, it is essential to attracting and retaining quality people to serve in our military forces.

The fastest and least expensive way to meet our housing needs is by taking advantage of opportunities to work with the private sector. Likewise, we can better meet our utility needs by relying on the private sector for the infrastructure and focusing our managers on questions of use and cost.

Appendix B

BASE ENVIRONMENTAL CLEANUP COSTS

BASE	CITY	SIZE	FUNDING TO DATE	ESTIMATED COST TO COMPLETE	TOTAL COMPLETE ION COST	ESTIMATED COMPLETION DATE	NUMBER OF CLEAN-UP SITES/DOD CONDITION RATING	CONTAMINANTS	MEDIA AFFECTED	HISTORY
Alameda Naval Air Station & Aviation Depot	Alameda	2634 acres, includes 1,000 off-shore	\$52.5m	\$190.5m	\$243m	FY18	13 level 1-4, 0 level 5-6, 17 level 7	Acetone, BTEX, chlorinated solvents, cyanide, heavy metals, herbicides, pesticides, methylene chloride, petroleum hydrocarbons, PAHs, PCBs, VOCs, and SVOCs	Groundwater, surface water/sediments, and soil	1993 BRAC recommended closure. Military closure 4-25-97
FISC Alameda Annex	Alameda	147 acres	\$ 7.0m	\$ 25.0m	\$ 32.0m	FY07		administered by Oakland FISC		Military closure Fall 1998
Hamilton Army Airfield	Novato & Marin County	722 acres	\$ 17.1m	\$ 12.7m	\$ 29.8m	FY26	6 level 1-4 11 level 5-6 level 7	Metals, VOCs, SVOCs, fuel hydrocarbons, PCBs, PAHs and pesticides	Groundwater, surface water/sediments and soil	The 1990 BRAC recommended closure 1995 Version II BRAC Cleanup Plan GSA Parcel closed 1985, Navy, 10-1-96, Army, early 1998
Hunters Pt Annex- Treasure Island Naval Station	San Francisco	936 acres, (493 land and 443 submerged acres)	\$114.7m	\$499.4m	\$614.0m	FY11	13 level 1-4, 0 level 5-6, 61 level 7	Heavy metals, PCBs, petroleum hydrocarbons, VOCs, and SVOCs	Groundwater, surface water/sediments, and soil	Jul 1991 BRAC recommended closure. Military closure 3-2-95
Mare Island Naval Shipyard	Vallejo	5,646 acres	\$ 34.5m	\$122.1m	\$156.6m	FY10	10 level 1-4, 0 level 5-6, 26 level 7	Heavy metals, VOCs, PCBs, pesticides, petroleum hydrocarbons, and lead oxides	Groundwater, surface water/sediments, and soil	July 1993 BRAC recommended closure. Military closure 4-1-96
Moffett Naval Air Station	Sunnyvale Mt. View	3,700 acres	\$ 60.0m	\$81.5m	\$141.5m	FY28		PCBs, petroleum products, DDT, chlorinated cleaning solvents, and heavy metals	Groundwater and soil	July 1991 BRAC recommended closure. Transferred 7-1-94
Oakland Army Base	Oakland	422 acres	\$ 2.6m	\$14.3m	\$ 16.9m	FY09	13 level 7	POCs, trichloroethane, solvents, lead, PCBs	Groundwater and soils	July 1995 BRAC recommend. Closure by July 2001
Oakland Naval Hospital	Oakland	183 acres	\$ 3.0m				little contamination			Military closure 9-30-96

BASE	CITY	SIZE	FUNDING TO DATE	ESTIMATED COST TO COMPLETE	TOTAL COMPLET- ION COST	ESTIMATED COMPLETION DATE	NUMBER OF CLEAN-UP SITES/DO Condition Rating	CONTAMINANTS	MEDIA AFFECTED	HISTORY
Oakland Fleet and Industrial Supply Center	Oakland	536 acres	\$ 8.0m							
Onizuka Air Station (realignment)	Mt. View	536 acres	\$ 8.0m	\$33.9m	\$41.90	FY06	15 level 1-4 0 level 5-6 13 level 7	Petroleum products, VOCs, SVOCs, PCBs, pesticides, and metals	Groundwater and soil	July 1995 BRAC recommended closure. Military closure Sept. 1998
Point Molate Naval Supply Center	Richmond	413 acres	\$ 7.0m	\$ 15.0m	\$ 22.0m	FY05		administered by Oakland FISC		Military closure 9-30-95.
Presidio Army Base	San Francisco	1,480 acres	\$ 78.5m	\$ 23.4m	\$101.9m	FY05	23 level 1-4 11 level 5-6 23 level 7	Petroleum hydrocarbons, heavy metals, solvents, pesticides, and Lead Based Paint	Groundwater and soil	December 1988 BRAC recommended closure. Transferred 3-2-95
Treasure Island Naval Station	San Francisco	717 acres	\$ 9.0m	\$70.9m	\$79.9m	FY04	11 level 1-4 0 level 5-6 20 level 7	Petroleum hydrocarbons, VOCs, SVOCs, chlorinated solvents, metals, pesticides, and PCBs	Groundwater and soil	July 1993 BRAC recommended closure. Military closure 9-30-97.

Source: Defense Environmental Restoration Program Report for FY1196 issued by DoD July 1997

Appendix C



STATUS AND PROGRESS

Program Funding | DERA Program |

Balancing Funding | BRAC Environmental Program |

DSMOA Program | DoD Overall Program |

The funding, status, and progress of the defense environmental restoration program for FY96 are discussed on the following pages. The relative risk site evaluation framework and the program's measures of merit have now seen a full year of implementation, providing more meaningful data by which to identify requirements, measure and analyze progress, and evaluate performance.

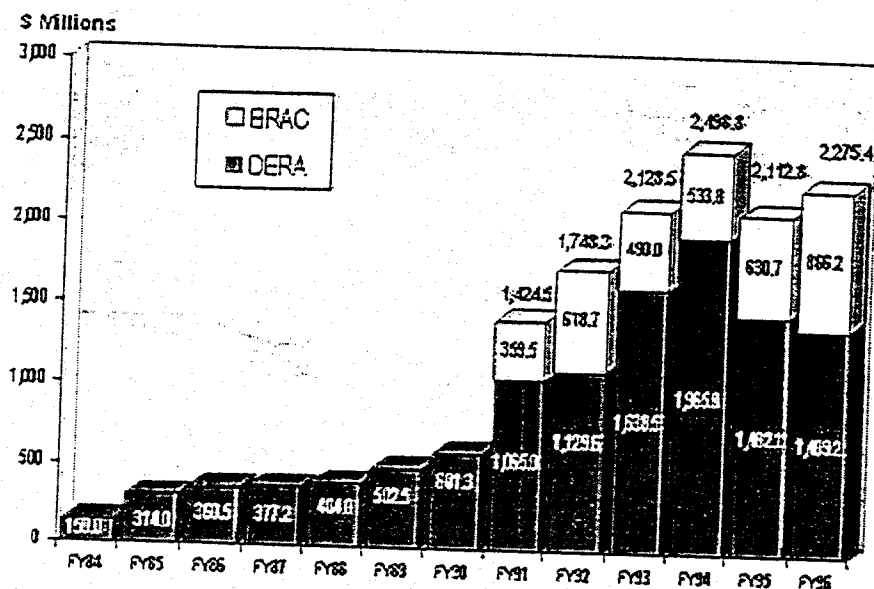


For more information about the initiatives mentioned above, please refer to the *DERP Report to Congress for FY95* on the World Wide Web <http://www.dtic.mil/envirodod/derpreport95/vol1/toc.html>

PROGRAM FUNDING

DoD has invested almost \$15 billion in its environmental restoration program through FY96. Congress has provided funds for environmental restoration in two accounts: approximately \$11.4 billion in the Environmental Restoration, Defense account, more commonly referred to as DERA, for operational DoD installations and FUDS; and approximately \$3.5 billion in the BRAC account for closing or realigning installations. Beginning in FY97, in accordance with devolvement, DERA funds will be provided in five accounts, one each for the Departments of the Army, Navy, and Air Force; the FUDS program; and a Defense-wide account serving the Defense Logistics Agency (DLA), the Defense Special Weapons Agency (DSWA), and the Office of the Secretary of Defense (OSD). The BRAC account will remain as it is currently structured.

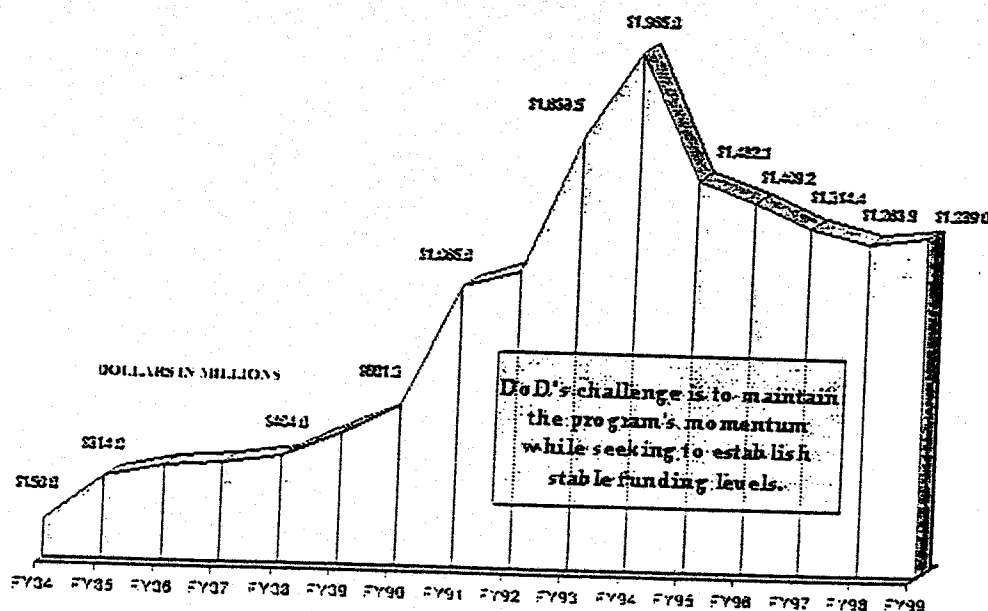
Funding History



More information on devolvement can be found in the *Report to Congress on the Devolvement of the Defense Environmental Restoration Account* on the World Wide Web at: <http://www.dtic.mil/envirodod/devolve.html>

Funding profiles for the DERA and BRAC environmental programs are presented on the following pages. The graph below shows the steep rise in DERA funding from FY90 to FY94, followed by a sharp decline in FY95 and a further reduction of about \$73 million in FY96. The steep slopes of the lines in the graph below, especially leading up to and following FY94, illustrate an important point in terms of funding stability. Most programs are best served by stable funding from year to year. Stable funding does not necessarily mean level funding, but rather either manageable growth or decline. Manageable increases or decreases in funding are especially important for DoD's environmental restoration program because there is a direct correlation between funding and execution in one year and continuing progress in subsequent years. Execution capabilities associated with staffing, contracting, and other resource considerations can be severely impacted both by wide fluctuations in funding and the inability to predict future levels of funding.

DERA Funding Trend



Dramatic changes in funding from one year to the next create tremendous upheaval and impede program execution and progress in future years.

Definitions

Cleanup:

Includes Interim Actions, Remedial Design (RD), Remedial Action (RA), Operation and Maintenance, Long-Term Monitoring, and Potentially Responsible Party¹ costs

Investigation:

Includes Preliminary Assessment (PA), Site Inspection (SI), and Remedial Investigation and Feasibility Study (RI/FS) costs

Management:

Includes program administration costs such as travel, training, and other support costs, as well as funding for ATSDR² and DSMOA³

Workyears:

Includes costs for DoD salaries

¹Includes DoD's share of costs incurred at sites where DoD is a PRP; these sites are typically commercially operated waste disposal facilities

²Includes costs of reimbursing ATSDR for health assessments and health risk studies conducted at DoD National Priorities List sites

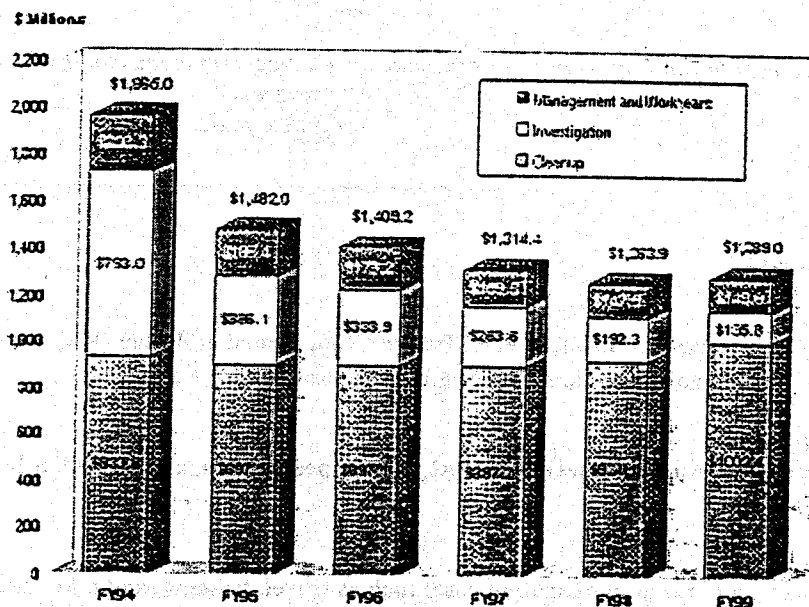
³Includes costs of reimbursing states and territories for technical services in support of investigation and cleanup efforts at DoD installations within their boundaries

The Federal Facilities Environmental Restoration Dialogue Committee stated in its final report that "... a stable funding base over the life of cleanup projects could greatly facilitate ... priority setting because it would provide regulated and regulating agencies as well as other stakeholders with a greater degree of certainty and the ability to plan and sequence cleanup activities and projects in an effective manner that is consistent with agreed upon priorities." DoD continues to seek a stable funding pattern and to work within the bounds of such funding from year to year. DoD intends to close any gaps between cleanup needs and funding availability through the identification and implementation of efficiencies.

DERA PROGRAM

The DERA funding distribution profile shown below reflects DERA program obligations in FY94, FY95, and FY96 and planned obligations in FY97, FY98, and FY99, by major category (cleanup, investigation, and management and workyears).

DERA Funding Profile



DoD has an established strategy and systematic process in place to identify, measure, and continuously improve performance for the environmental restoration program. DoD's approach is aimed at maintaining the momentum gained over the past several years, and establishing program consistency and stability in the face of funding reductions. DoD's goals and investment strategy are geared towards completing the program in accordance with statutory requirements by focusing on reducing risk and setting priorities for appropriate investigation and cleanup work in accordance with risk reduction and site completion goals.

BALANCING FUNDING

DoD continues to believe that establishing numerical goals limiting investigation while requiring a minimum level of spending on cleanup is potentially counterproductive and may create an inappropriate incentive to spend more on the program in the long term than might otherwise be required. Such goals could discourage appropriate and worthwhile investment in investigations that might result in more cost effective remedies being identified or a determination that cleanup is not required at a site. At the end of FY96, 10,660 DoD sites (40 percent of the total inventory) have been determined to require no further action based on investigation work, eliminating the need for expensive cleanup actions at these sites.

Cleanup vs. Other Program Obligations and Planning Estimates for Fiscal Years 1993 through 1997¹

Dollars in Millions

Category ²	FY93	FY94	FY95	FY96	FY97
Studies and Investigations	\$761 (46%)	\$793 (40%)	\$386 (26%)	\$333 (24%)	\$264 (20%)
Administration and Support	\$247 (15%)	\$238 (12%)	\$198 (13%)	\$178 (13%)	\$153 (12%)
(Total of Above)	\$1,008 (61%)	\$1,031 (52%)	\$584 (39%)	\$511 (36%)	\$417 (32%)
Cleanup	\$631 (39%)	\$934 (48%)	\$898 (61%)	\$898 (64%)	\$897 (68%)
Total DERA Funding	\$1,639	\$1,965	\$1,482	\$1,409	\$1,314

NOTES:

¹This table and the accompanying discussion satisfy the reporting requirement specified in Section 323(b) of the FY96 Defense Authorization Act regarding DoD's goal for limiting DERA expenditures for administration, support, studies, and investigations.

²Expenditure categories are listed in accordance with language in Section 323(a) of the FY96 Defense Authorization Act. Categories are defined on page 6; administration and support are equivalent to management and workyears.

Appropriate and cost-effective investigations ensure that the nature and extent of contamination are adequately understood. As a result, DoD, the regulatory agencies, and affected communities have the information needed to determine the most appropriate cleanup actions. In the absence of this information, remedy selections may exceed what is really needed or may result in construction of costly and/or ineffective remedies that may ultimately have to be augmented with the proper remedy.

Schofield Army Barracks, Hawaii, featured below, is one of many installations where appropriate investigation has achieved savings in cleanup costs.

DoD continues to improve program and site management efforts to reduce the cost and increase the speed of investigations. The program has a bias for action and a natural trend of expending increasingly more dollars on actual cleanup. As shown on page 7, direct obligations on investigations have decreased from 46 percent in FY93 to 24 percent of the total FY96 DERA budget. Obligations for cleanup have increased from 39 to 64 percent of DERA funds over the same period. DoD's initiatives are focusing the program on the most appropriate and effective investments in reducing risk to human health and the environment.

The benefits of investing funds into focused, technically defensible environmental studies have been shown clearly at Schofield Army Barracks, Hawaii. Groundwater investigations performed at the installation demonstrated the technical infeasibility of implementing a pump-and-treat groundwater remedy to treat trichloroethylene and carbon tetrachloride contamination. The aquifer underlying the installation supplies a majority of the population of Oahu with drinking water, either directly or indirectly through water supply wells installed in that aquifer or in downgradient aquifers.

Early in the investigation, the Army recognized the tremendous cost, for both investigative and cleanup activities, associated with application of traditional pump-and-treat remedies to address groundwater contamination at the site. The excessive depth to groundwater (about 600 feet) through basalt bedrock, and the tremendous volume of water flowing through the system (about 125 million gallons per day) made investigation and cleanup cost-prohibitive. Investigations were focused on collecting groundwater data to determine the direction of movement of the plume and identifying water supply wells in the path of the plume. Unique, state-of-the-art groundwater investigation and

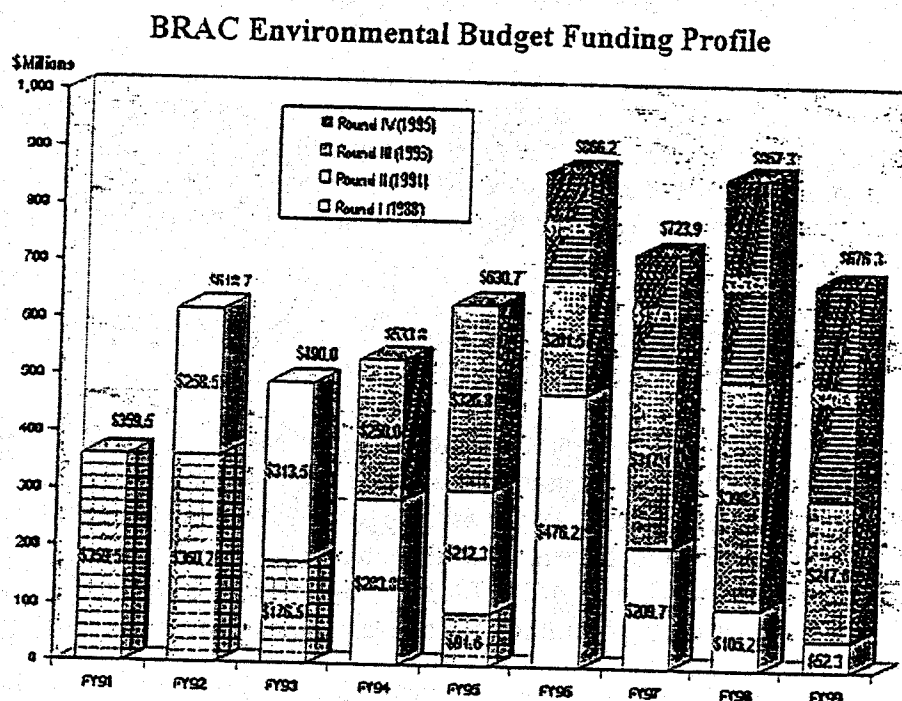
analysis tools, such as hydrophysical logging, natural isotopic and geochemical tracers, and DoD's new groundwater modeling system (see Volume 1, page 21) helped investigators make maximum use of limited data. This approach minimized the need to install costly monitoring wells and took advantage of existing irrigation and supply wells as monitoring points. The collected data and associated groundwater modeling were used to document the technical infeasibility of pump-and-treat remediation and to support the implementation of a wellhead monitoring and treatment remedy. By focusing on collecting data to support wellhead treatment over a pump-and-treat remedy, the Army avoided investigation costs of more than \$10 million and unnecessary cleanup costs estimated at \$150 to \$300 million.

BRAC ENVIRONMENTAL PROGRAM

The funding for the BRAC environmental program is part of the overall BRAC account and encompasses more than environmental restoration efforts. BRAC environmental funding also addresses closure-related environmental compliance and environmental planning.

To ensure maximum flexibility, BRAC funding is provided in a five-year account, and funds are not "fenced" within the account. This means that specific amounts are not appropriated for each type of BRAC environmental activity. However, a funding limit or ceiling is now specified for BRAC environmental restoration in the Defense Appropriations Act.

The BRAC environmental budget funding profile shown below reflects BRAC funding allocations from FY91 through FY96 and BRAC funding budgeted for FY97, FY98, and FY99, by BRAC round.



DSMOA PROGRAM

States and territories can be reimbursed for technical services in support of investigation and cleanup efforts at DoD installations within their boundaries under the Defense and State Memorandum of Agreement (DSMOA) program. Forty-three states, four territories, and the District of Columbia have signed DSMOAs, and 42 states, two territories and the District of Columbia have approved Cooperative Agreements (CA). Appendix H of this report provides specific state or territory DSMOA and CA information. Approximately 1,000 installations, both active and closing, are covered under these agreements. Since 1990, more than \$142.5 million has been provided to states and territories for services

that qualify under the program.

Two steps are required for a state or territory to participate in the program. The initial requirement is for the state or territory to enter into a DSMOA which provides a mechanism for involvement in restoration activities and establishes the terms and conditions required for reimbursement. Reimbursement is then available through an approved CA, which is valid for two years. A list of services that qualify for reimbursement is provided on the next page.

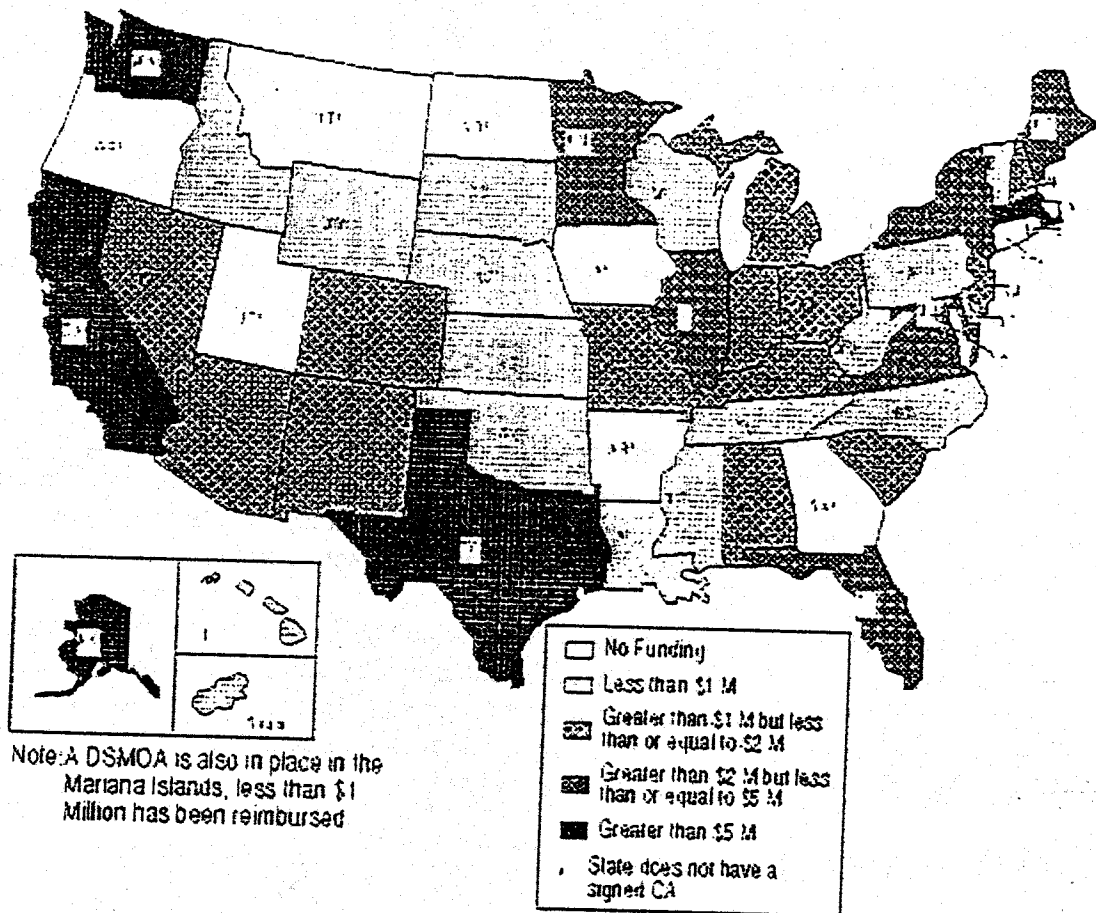
For active and closing installations, state reimbursable activities may begin at the site identification stage and continue through construction of the remedy and long-term operation or monitoring. For FUDS, state reimbursable activities commence after site eligibility for DERA funding is determined, providing that no litigation by the state is in process against DoD for that particular site. The state also must certify that no supplemental funds from DoD or other federal sources have been previously provided. FUDS that meet these criteria are managed in the same way as active and closing installations.

The level and type of reimbursable services requested by DoD are based on the effort under way at an installation or site and the complexity of the contamination problem. Using a work plan concept, the state reviews the level of effort and type of work that is planned by the DoD Components, and the level of state reimbursable services is determined. The Army, through the U.S. Army Corps of Engineers, is the executive agent for the DSMOA/CA program.

DOD OVERALL PROGRAM

The tables on page 12 present the status and progress of investigation and cleanup efforts as of September 30, 1996 for sites at DoD installations and FUDS.

DSMOA Reimbursements FY90 Through FY96



Services that Qualify for Reimbursement Under DSMOA

- Technical review of documents or data
- Identification and explanation of state or territorial applicable or relevant and appropriate requirements (ARARs)
- Site visits
- Technical Review Committee (TRC) or Restoration Advisory Board (RAB) participation
- Cooperative Agreement preparation and administration
- DSMOA preparation, administration, and amendments
- Technical review and comment on all documents and data regarding DoD prioritization of sites
- Determination of scope and applicability of agreements (for example, Federal Facility Agreements) and assurance of satisfactory performance of Interagency Agreements, excluding any litigation costs against the U.S. Government
- Independent quality assurance/quality control samples
- Other services (negotiated on a state-by-state or installation-specific basis)

DoD's focus on cleanup and reducing risk continues to render real results through the capability, dedication, and ingenuity of the DoD agencies executing the work. DoD has developed measures of merit to measure progress towards established goals. These measures are essential for assessing the strength of the program and the success of new program strategies. Three categories of measures of merit have been developed to assess progress and performance:

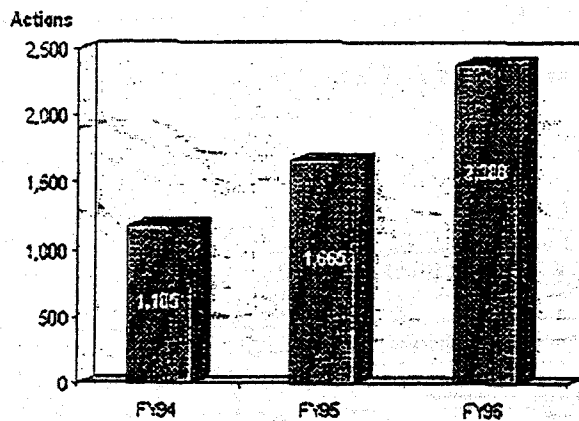
- Milestones accomplished, such as interim actions taken
- Progress at sites, such as investigation, design, cleanup, or response complete

final cleanup requirements. During the investigation phase, opportunities for interim actions are constantly evaluated and implemented, where appropriate, to reduce risk and accelerate the overall restoration process.

Progress at Sites

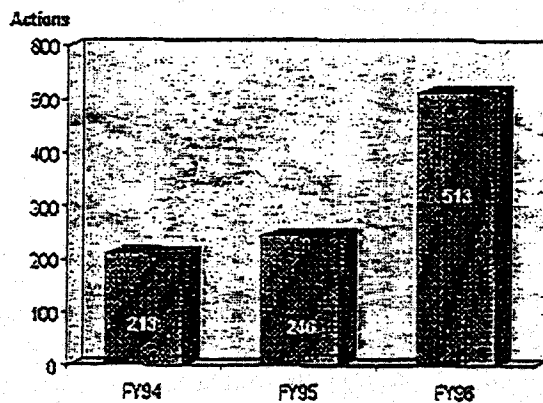
Traditional measures of the restoration program's status and progress are determined by the number of sites in any particular phase of the program. Response complete and cleanup under way are two important indicators.

Interim Actions Completed at DERA Sites Through FY94, FY95, and FY96



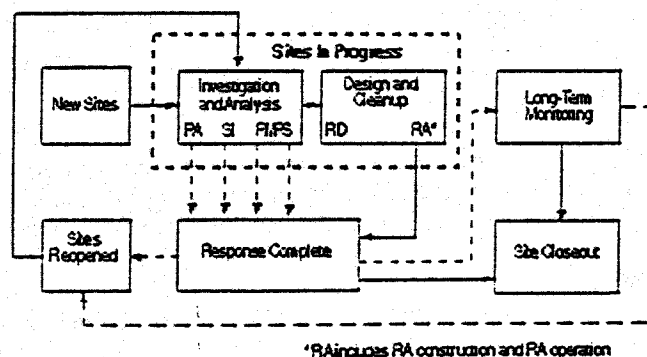
723 interim actions were completed at operational installations and FUDS properties in FY96

Interim Actions Completed at BRAC Sites Through FY94, FY95, and FY96



267 interim actions were completed at BRAC installations in FY96

Conceptual Progression of Sites in the Restoration Program



- Relative risk reduction

DoD Operational and BRAC Installations

Phase	Completed	Underway	Future
	Sites (No. Actions)		
Investigation	13,316	8,908	59
Interim Action	2,174 (2,659)	765 (872)	
Design	1,240	710	4,744
Cleanup	1,691	706	5,223
Operation and Maintenance	126	773	4,607

Total No. of Installations with Response Complete at all Sites:	970
Total No. of Installations with Sites in Progress:	762
Total No. of Installations:	1,732
Total No. of Sites:	22,883
No. of Sites in Progress:	10,952
No. of Sites with Response Complete:	11,931

Formerly Used Defense Sites

Phase	Completed	Underway	Future
	Sites (No. Actions)		
Investigation	1,474	2,575	
Interim Action	123 (242)	22 (49)	
Design	882	216	1,116
Cleanup	723	329	1,233
Operation and Maintenance	3	11	61

Total No. of Potential Properties:	9,029
Eligible Properties Determined to Require Response Action:	2,651
Properties with Eligibility Determination/Preliminary Assessment Underway or Pending:	763
	3,414
Properties Determined Ineligible:	2,136
Eligible Properties Determined to Require No Action:	3,479
	5,615

No. of Properties Determined to Require Response Action:	2,651
Total No. of Sites:	4,049
No. of Sites in Progress:	2,567
No. of Sites with Response Complete:	1,082

Interim Actions

One of DoD's priorities for accelerating cleanup and reducing risk has been the continued focus on interim actions-removal actions and interim remedial actions. The number of interim actions completed and the number of interim actions under way at any given time are indications of cleanup progress. As of September 30, 1996:

- 2,901 interim actions at 2,297 sites have been completed, and another 921 interim actions were under way at 787 sites
- The cumulative number of interim actions completed by the end of FY96 at both DERA and BRAC sites represents an increase of about 52 percent over the cumulative number of interim actions completed by the end of FY95

Interim actions can significantly reduce or eliminate risk to human health and the environment. Actions such as installing fences and providing alternate drinking water supplies immediately reduce risks by eliminating potential exposure to contaminants. Actions such as source removal, capping, and pumping and treating groundwater stabilize sites by controlling or eliminating migration of contaminants. Although initiated as interim measures, many actions involving waste removal and treatment satisfy

- ### *DoD Operational and BRAC Installations*

Phase	Completed	Underway	Future
	Sites (No. Actions)		
Investigation	13,916	8,908	59
Interim Action	2,174 (2,659)	765 (872)	
Design	1,240	710	4,744
Cleanup	1,591	705	5,223
Operation and Maintenance	136	773	4,607

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- Relative risk reduction

DoD Operational and BRAC Installations

Phase	Completed	Underway	Future
	Sites (No. Actions)		
Investigation	13,916	8,908	59
Interim Action	2,174 (2,659)	763 (872)	
Design	1,240	710	4,744
Cleanup	1,691	705	5,223
Operation and Maintenance	135	773	4,607

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Total No. of Installations with Sites in Progress:	762
Total No. of Installations:	1,732
Total No. of Sites:	22,883
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No. of Sites with Response Complete:	11,931

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Phase	Completed	Underway	Future
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Interim Action	123 (242)	22 (49)	
Design	882	216	1,116
Cleanup	733	323	1,233
Operation and Maintenance	3	11	61

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Properties Determined Ineligible:	2,135
Eligible Properties Determined to Require No Action:	3,479
	5,615
No. of Properties Determined to Require Response Action:	2,651
Total No. of Sites:	4,049
No. of Sites in Progress:	2,957
No. of Sites with Response Complete:	1,082

Interim Actions

One of DoD's priorities for accelerating cleanup and reducing risk has been the continued focus on interim actions-removal actions and interim remedial actions. The number of interim actions completed and the number of interim actions under way at any given time are indications of cleanup progress. As of September 30, 1996:

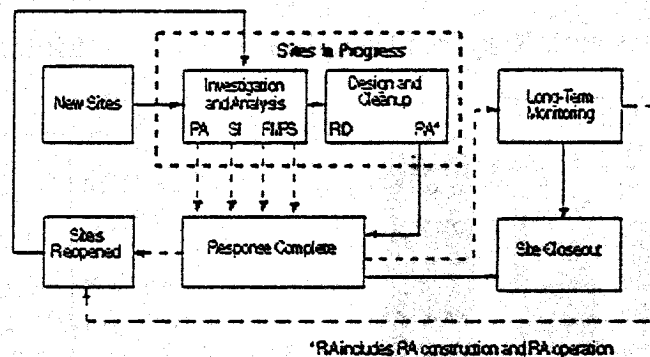
- 2,901 interim actions at 2,297 sites have been completed, and another 921 interim actions were under way at 787 sites
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Traditional measures of the restoration program's status and progress were determined by the number of sites in any particular phase of the program. Typically, status is measured at the end of a fiscal year (that is, the status of sites as of September 30), and the count is compared with that of the preceding fiscal year.

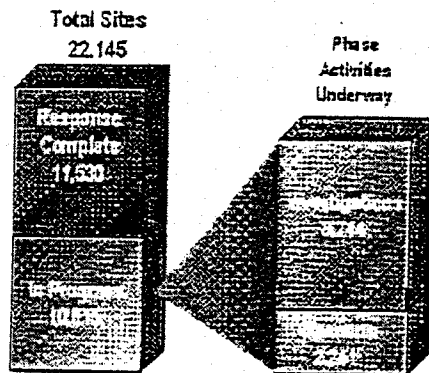
The total number of sites may fluctuate as new sites are identified, sites are reopened, and existing sites are determined to require no further action. New sites are added to the program as a result of RCRA Facility Assessments, Environmental Baseline Surveys for BRAC installations, changes in eligibility policies, and otherwise newly discovered CERCLA and UST sites. Sites previously determined to require no further action and closed out as a "response complete" may be reopened if a regulatory agency does not concur with DoD's determination. The net effect can sometimes be a decrease in the number of sites reported as "response complete" and an accompanying increase in the number of active sites remaining in the program.

Conceptual Progression of FUDS Properties

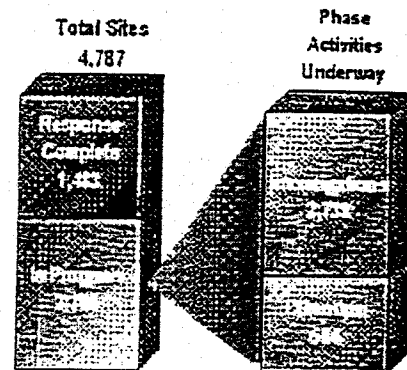


The restoration program at FUDS properties is similar to that at DoD installations. However, information concerning the origin of contamination, land transfer, and current ownership must be evaluated to determine whether a site is eligible for DoD funding. FUDS are real property formerly owned by, leased to, used by, or otherwise under the operational control of DoD. During the preliminary assessment phase, an inventory project is conducted to determine (1) if the property is eligible for DERA funding and (2) if any contamination exists. If the property is eligible and further response action is required, the identified site or sites begin the standard restoration process. Because of the inventory phase associated with the FUDS program, information on the status and progress of FUDS properties is provided separately from other DoD installations in this report.

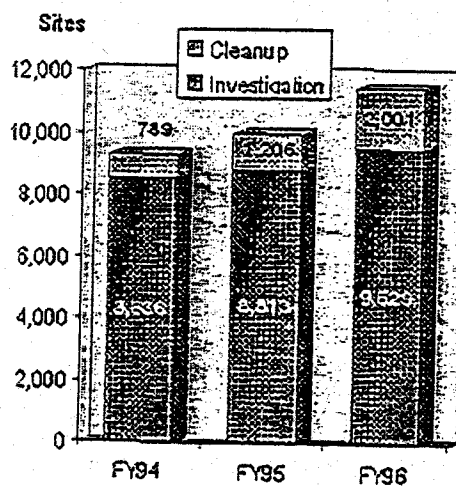
DERA Overall Site Status as of FY96



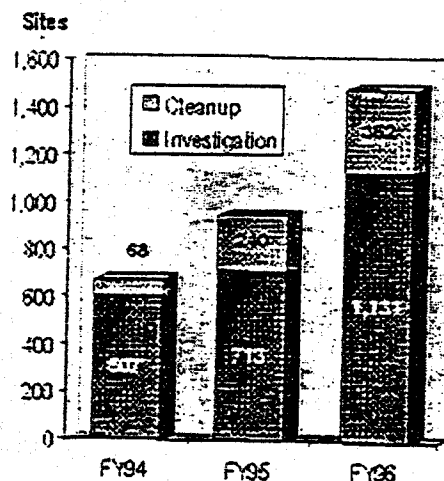
BRAC Overall Site Status as of FY96



DERA Sites with Response Complete



BRAC Sites with Response Complete



Of the 22,145 sites at operational installations and FUDS properties that are funded by DERA, response is complete at 11,530 (52 percent of the total inventory). Of the 4,787 BRAC sites, response is complete at 1,483 (31 percent of the total BRAC site inventory).

In FY96, DoD increased its number of response complete sites at operational installations and FUDS by 1,511; 795 were based on cleanup, and 716 were based on investigation. At BRAC installations, the number of response complete sites increased by 530; 112 were based on cleanup, and 418 were based on investigation.

Relative Risk Reduction

Faced with the challenge to execute the restoration program in a constrained financial environment, DoD has developed the relative risk site evaluation methodology, which provides a quantifiable basis for justifying requirements and allocating funds. This ensures that DoD is able to direct the necessary resources to sites that pose the greatest risk first. In addition to providing a tool for prioritizing and sequencing site work, the relative risk site evaluation methodology also provides a basis for establishing meaningful, measurable goals and performance measures.

In FY96 DoD continued the important transition to this new approach to prioritizing work and measuring progress. The relative risk site evaluation data for both DERA and BRAC sites, as of the end

of FY96, are presented in the table below.

A baseline of relative risk site evaluation data was established in FY95. Throughout FY96, DoD has improved the baseline data by completing the evaluation of 843 sites that were previously not evaluated. FY96 is the first year that performance measures based on relative risk reduction were evaluated. These measures have already aided the program with respect to the planning, programming, and budgeting of funds targeted to achieve the goals associated with relative risk reduction.



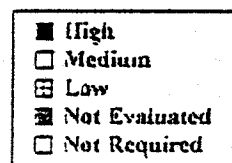
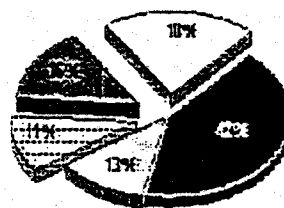
The DoD Relative Risk Site Evaluation Primer can be found on the World Wide Web at :
<http://www.dtic.mil/envirodod/rellrisk/rellrisk.html>

FY96 DERA AND BRAC RELATIVE RISK SITE EVALUATION STATUS

DoD COMPONENT	Army	Navy	Air Force	DLA	DSMA	FUDS	DoD Total
Sites with Response Complete	7,765	1,382	2,493	290	1	1,082	13,013
Relative Risk at Sites							
High	1,450	1,330	1,030	64	1	225	4,100
Medium	605	639	504	20	0	95	1,863
Low	631	618	754	48	7	63	2,121
Not Evaluated	1,651	396	560	198	19	1,014	3,838
Not Required*	83	68	254	14	8	1,570	1,997
Total Number of Sites	12,185	4,433	5,595	634	36	4,049	26,932

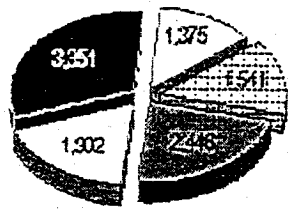
*Sites that have remedy in place, response complete, or no further action required designations do not require relative risk evaluation, given that DoD has committed that operations and maintenance and monitoring requirements at these sites would be funded.

Percent of Sites Planned for Cleanup Funding From FY96 through FY03

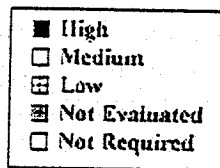


A major part of DoD's management strategy is to use relative risk as a tool to help direct funding to those sites that pose the higher risk. Between FY96 and FY03, 42 percent of sites that are planned for cleanup funding will be sites that have a high designation based on the current relative risk site evaluation. At this time, it is uncertain how many of the not evaluated sites that are projected to receive funding will be evaluated as high sites.

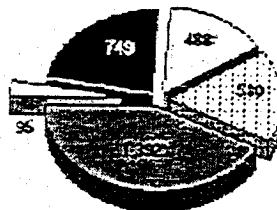
Relative Risk of DERA Sites in Progress FY96



Total 10,615 Sites



Relative Risk of BRAC Sites in Progress FY96



Total 3,304 Sites

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Appendix D

Closing Bay Area Military Bases' Infrastructure Improvement Costs
(in millions of dollars)

<u>Base</u>	<u>Cost for</u> <u>Electricity</u>	<u>Cost for</u> <u>Gas</u>	<u>Cost for</u> <u>Telephone</u>	<u>Cost for</u> <u>Potable</u> <u>Water</u>	<u>Cost for</u> <u>Stormwater &</u> <u>Wastewater</u>	<u>Cost for</u> <u>Sewer</u>	<u>Cost for</u> <u>Roads &</u> <u>Imprymnts</u>	<u>Cost for</u> <u>Building/</u> <u>Seismic</u> <u>Upgrades</u>	<u>Cost for</u> <u>Building</u> <u>Removal</u>	<u>Total</u> <u>Infrastructure</u> <u>Costs</u>
ALAMEDA NAVAL AIR STATION (LAMBRA)	\$22.1 M	\$3.5 M		\$17 M	\$55.3 M		\$92.6 M			<u>190.5</u>
HAMILTON ARMY AIRFIELD & DOD NOVATO HOUSING	\$10.8 M	\$0.3 M	\$1.4 M	\$9.2 M	\$2.1 M	\$4.6 M	\$11.4 M			<u>39.8</u>
HAMILTON - GSA PARCEL - PRIVATE SALE*	\$1.4 M			\$0.85 M	\$4.1 M	\$1 M	\$7.1 M	\$1.9 M	\$3.2 M	<u>19.55</u>
HUNTERS POINT SHIPYARD	\$13 M	\$3.8 M		\$4.1 M		\$49.7 M	\$52 M			<u>122.6</u>
MARE ISLAND * (LAMBRA)	\$17.3 M	\$1.2 M	\$1 M	\$10.2 M	\$19.4 M	\$4.7 M	\$171 M		\$19 M	<u>243.8</u>
OAK KNOLL								up to \$7.6 M	up to \$5M	<u>12.6</u>
OAKLAND ARMY BASE*	up to \$2.21 M	up to \$.82 M		up to \$4.0 M	\$3.2 M	\$0.96M	up to \$39.38 M			<u>50.57</u>

Closing Bay Area Military Bases' Infrastructure Improvement Costs
(in millions of dollars)

Base	Cost for Electricity	Cost for Gas	Cost for Telephone	Cost for Potable Water	Cost for Stormwater & Wastewater	Cost for Sewer	Cost for Roads & Imprvmnts	Cost for Building/ Seismic Upgrades	Cost for Building Removal	Total Infrastructure Costs
POINT MOLATE*							up to \$0.5 M			<u>5</u>
PRESIDIO				\$30 M		\$8 M	\$4 M	\$274 M	\$20 M	<u>336</u>
TREASURE ISLAND*	\$2.5 M	\$1.15 M	\$1.5 M	up to \$20 M		up to \$4	\$1.4 M			<u>30.55</u>
TOTALS	<u>69.31</u>	<u>10.77</u>	<u>3.9</u>	<u>95.35</u>	<u>84.1</u>	<u>72.96</u>	<u>379.38</u>	<u>283.5</u>	<u>47.2</u>	<u>1046.47</u>

SOURCE: Governor's Office of Planning & Research, November 1997, except where noted below

Bases are at different stages of economic development conveyance process. This table reflects current cost estimates available. Additional infrastructure cost analyses are in process. Example: Building upgrade costs will affect all bases, currently only Presidio estimate available.

- * HAMILTON GSA: also \$9.5 M in soft costs, misc contractor and contingencies, and \$1.5 M in park fee, also cable TV \$.9 M
- * HAMILTON AIRFIELD & DOD HOUSING: creek improvement \$.5 M, flooded runway parcel \$2.5 M
- * HUNTERS POINT: fire dept. services & park costs \$37 M, designing wet & dry utility backbone estimated at \$100 M
- * MARE ISLAND: on-site transportation \$64.4 M, off-site transportation at \$106 M includes a third bridge, gas retrofit \$3.7 M, electric retrofit \$4.6 M, demolition estimated at \$19 M versus \$52 M for building compliance
- * OAKLAND ARMY BASE: figures developed for the Oakland Base reuse Authority by EDAAW, 1998
- * PRESIDIO: Rehab of buildings proposed for removal was expected to cost \$30 M therefore removal was recommended
- * TREASURE ISLAND: Estimates prepared by Olivia Chen Consultants & Moffatt & Nichol Engineers for the Treasure Island Reuse Plan Existing Conditions Report; Vol. 2 - estimates provided are exclusive of geotechnical considerations which could necessitate replacement of all infrastructure & stabilization of the island with costs estimated as high as \$600M

Bases not included:

- Moffett and Onizuka: property is under exclusive jurisdiction of the federal government, figures unavailable
- Naval Public Works Center: was an office function with no real property associated
- FISC Oakland: property reuse is being financed by Port of Oakland, figures unavailable